

Name of Work: Improvements to roads and construction of RCC drains
at Attur Village and surrounding areas in Ward No. 03

EMB

"FIRST AND FINAL BILL"

ame of Work: Improvements to roads and construction of RCC drains
at Attur Village and surrounding areas in Ward No. 03

PRE-MEASUREMENT SHEETS

"FIRST AND FINAL BILL"

Name of Work: Improvements to roads and construction of RCC drains at Attur Village and surrounding areas in Ward No. 03

Pre-Measurement : 14.11.2019

Detailed Measurements

Item No	Description of Item	No	Length	Breadth	Depth	Qty	Unit
1	KSRRB 300 - Excavation for road, drains and similar works KSRRB 300-1. Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications.						
	Attur layout						
	Sandeer Unni Krishna Road to 1st cross						
	2nd main, RHS						
	Ch: 0 to 30m	1	30.00	1.20	0.90	32.40	
	Ch: 30 to 33.80m	1	3.80	1.20	0.90	4.10	
	Ch: 33.80 to 42.50m	1	8.70				
	Ch: 42.5 to 70.00m	1	27.50	1.20	0.90	29.70	
	2nd main, LHS						
	Ch: 0 to 30m	1	30.00	1.20	0.90	32.40	
	Ch: 30 to 60m	1	30.00	1.20	0.90	32.40	
	Ch: 60 to 71m	1	11.00	1.20	0.90	11.88	
	3rd main, RHS						
	Ch: 0 to 30m	1	30.00	1.20	0.90	32.40	
	Ch: 30 to 60m	1	30.00	1.20	0.90	32.40	
	Ch: 60 to 69.5m	1	9.50	1.20	0.90	10.26	
	3rd main, LHS						
	Ch: 0 to 30m	1	30.00	1.20	0.90	32.40	
	Ch: 30 to 60m	1	30.00	1.20	0.90	32.40	
	Ch: 60 to 73m	1	13.00	1.20	0.90	14.04	
	1st cross to 2nd cross						
	2nd main, RHS						
	Ch: 0 to 27.30m	1	27.30	1.20	0.90	29.48	
	Ch: 27.30 to 36.90m	1	9.60				
	Ch: 36.90 to 54.30m	1	17.40	1.20	0.90	18.79	
	2nd main, LHS						
	Ch: 0 to 30m	1	30.00	1.20	0.90	32.40	
	Ch: 30 to 54.2m	1	24.20	1.20	0.90	26.14	
	1st cross to 2nd cross						
	3rd main, RHS						
	Ch: 0 to 26.90m	1	26.90	1.20	0.90	29.05	
	Ch: 26.90 to 36.30m	1	9.40				
	Ch: 36.30 to 45.45m	1	9.15	1.20	0.90	9.88	
	3rd main, LHS						
	Ch: 0 to 30m	1	30.00	1.20	0.90	32.40	
	Ch: 30 to 53.9m	1	23.90	1.20	0.90	25.81	
	1st cross to 2nd cross						
	4th main, RHS						
	Ch: 0 to 30m	1	30.00	1.20	0.90	32.40	
	Ch: 30 to 54.6m	1	24.60	1.20	0.90	26.57	
	4th main, LHS						
	Ch: 0 to 10.2m	1	10.20				
	Ch: 10.2 to 40.2m	1	30.00	1.20	0.90	32.40	
	Ch: 40.2 to 54.8m	1	14.60	1.20	0.90	15.77	

2nd cross to 3rd cross						
2nd main, RHS						
Ch: 0 to 30m	1	30.00	1.20	0.90	32.40	
Ch: 30 to 31.1m	1	1.10	1.20	0.90	1.19	
Ch: 31.1 to 36.6m	1	5.50				
Ch: 36.6 to 40.6m	1	4.00	1.20	0.90	4.32	
Ch: 40.6 to 43.8m	1	3.20				
Ch: 43.8 to 55.0m	1	11.20	1.20	0.90	12.10	
Ch: 55.0 to 64.2m	1	9.20				
Ch: 64.2 to 72.9m	1	8.70	1.20	0.90	9.40	
2nd main, LHS						
Ch: 0 to 30m	1	30.00	1.20	0.90	32.40	
Ch: 30 to 60m	1	30.00	1.20	0.90	32.40	
Ch: 60 to 74.5m	1	14.50	1.20	0.90	15.60	
2nd cross to 3rd cross						
3rd main, RHS						
Ch: 0 to 30m	1	30.00	1.20	0.90	32.40	
Ch: 30 to 60m	1	30.00	1.20	0.90	32.40	
Ch: 60 to 71.8m	1	11.80	1.20	0.90	12.74	
3rd main, LHS						
Ch: 0 to 30m	1	30.00	1.20	0.90	32.40	
Ch: 30 to 60m	1	30.00	1.20	0.90	32.40	
Ch: 60 to 73.4m	1	13.40	1.20	0.90	14.47	
2nd cross to 3rd cross						
4th main, RHS						
Ch: 0 to 27.4m	1	27.40	1.20	0.90	29.59	
Ch: 27.4 to 36.5m	1	9.10				
Ch: 36.5 to 54.9m	1	18.40	1.20	0.90	19.87	
4th main, LHS						
Ch: 0 to 30m	1	30.00	1.20	0.80	28.80	
Ch: 30 to 60m	1	30.00	1.20	0.90	32.40	
Ch: 60 to 74.7m	1	14.70	1.20	0.90	15.88	
2nd cross						
Ch: 0 to 25.6m	1	25.60	1.20	0.90	27.65	
Road Gap						
Ch: 0 to 25.5m	1	25.50	1.20	0.90	27.54	
Road Gap						
Ch: 0 to 25.2m	1	25.20	1.20	0.90	27.22	
Road Gap						
Ch: 0 to 25.8m	1	25.80	1.20	0.90	27.86	
Road Gap						
Ch: 0 to 25.5m	1	25.50	1.20	0.90	27.54	
Culvert						
1st cross 2nd Mn	1	4.90	1.80	0.90	7.94	
1st cross 3rd Mn	1	5.00	1.80	0.90	8.10	
1st cross 4th Mn	1	4.40	1.80	0.90	7.13	
Present Qty					1192.07	Cum

Contractor



Assistant Engineer

2

12/11/2019

Present Qty 1192.07 Cum

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ಯಶವಂತರಾಯನಗರ, ಬೆಂಗಳೂರು-108
ಜಿ.ಜಿ.ಎಂ.ಕೆ. ಬೆಂಗಳೂರು-108

Name of Work: Improvements to roads and construction of RCC drains at Attur Village and surrounding areas in Ward No. 03

Age of Pre-Measurement : 18.11.2019

Detailed Measurements

Item No	Description of Item	No	Length	Breadth	Depth	Qty	Unit
2	KSRRB M2100-10. Providing and laying Plain cement concrete of mix 1:3:6 with OPC @ 220kgs, with crushed 40mm and down size graded granite metal coarse aggregates @0.89cum and fine aggregates @ 0.46cum, in foundation mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days						
	Attur layout						
	Sandeer Unni Krishna Road to 1st cross						
	2nd main, RHS						
	Ch: 0 to 30m	✓	30.00	1.20	0.15	5.40	
	Ch: 30 to 33.80m	✓	3.80	1.20	0.15	0.68	
	Ch: 33.80 to 42.50m	✓	8.70				
	Ch: 42.5 to 70.00m	✓	27.50	1.20	0.15	4.95	
	2nd main, LHS						
	Ch: 0 to 30m	✓	30.00	1.20	0.15	5.40	
	Ch: 30 to 60m	✓	30.00	1.20	0.15	5.40	
	Ch: 60 to 71m	✓	11.00	1.20	0.15	1.98	
	3rd main, RHS						
	Ch: 0 to 30m	✓	30.00	1.20	0.15	5.40	
	Ch: 30 to 60m	✓	30.00	1.20	0.15	5.40	
	Ch: 60 to 69.5m	✓	9.50	1.20	0.15	1.71	
	3rd main, LHS						
	Ch: 0 to 30m	✓	30.00	1.20	0.15	5.40	
	Ch: 30 to 60m	✓	30.00	1.20	0.15	5.40	
	Ch: 60 to 73m	✓	13.00	1.20	0.15	2.34	
	1st cross to 2nd cross						
	2nd main, RHS						
	Ch: 0 to 27.30m	✓	27.30	1.20	0.15	4.91	
	Ch: 27.30 to 36.90m	✓	9.60				
	Ch: 36.90 to 54.30m	✓	17.40	1.20	0.15	3.19	
	2nd main, LHS						
	Ch: 0 to 30m	✓	30.00	1.20	0.15	5.40	
	Ch: 30 to 54.2m	✓	24.20	1.20	0.15	4.36	
	1st cross to 2nd cross						
	3rd main, RHS						
	Ch: 0 to 26.90m	✓	26.90	1.20	0.15	4.84	
	Ch: 26.90 to 36.30m	✓	9.40				
	Ch: 36.30 to 45.45m	✓	9.15	1.20	0.15	1.65	
	3rd main, LHS						
	Ch: 0 to 30m	✓	30.00	1.20	0.15	5.40	
	Ch: 30 to 53.9m	✓	23.90	1.20	0.15	4.30	
	1st cross to 2nd cross						
	4th main, RHS						
	Ch: 0 to 30m	✓	30.00	1.20	0.15	5.40	
	Ch: 30 to 54.6m	✓	24.60	1.20	0.15	4.43	
	4th main, LHS						
	Ch: 0 to 10.2m	✓	10.20				
	Ch: 10.2 to 40.2m	✓	30.00	1.20	0.15	5.40	
	Ch: 40.2 to 54.8m	✓	14.60	1.20	0.15	2.63	

2nd cross to 3rd cross							
2nd main, RHS							
Ch: 0 to 30m	1	30.00	1.20	0.15	5.40		
Ch: 30 to 31.1m	1	1.10	1.20	0.15	0.20		
Ch: 31.1 to 36.6m	1	5.50					
Ch: 36.6 to 40.6m	1	4.00	1.20	0.15	0.72		
Ch: 40.6 to 43.8m	1	3.20					
Ch: 43.8 to 55.0m	1	11.20	1.20	0.15	2.02		
Ch: 55.0 to 64.2m	1	9.20					
Ch: 64.2 to 72.9m	1	8.70	1.20	0.15	1.57		
2nd main, LHS							
Ch: 0 to 30m	1	30.00	1.20	0.15	5.40		
Ch: 30 to 60m	1	30.00	1.20	0.15	5.40		
Ch: 60 to 74.5m	1	14.50	1.20	0.15	2.61		
2nd cross to 3rd cross							
3rd main, RHS							
Ch: 0 to 30m	1	30.00	1.20	0.15	5.40		
Ch: 30 to 60m	1	30.00	1.20	0.15	5.40		
Ch: 60 to 71.8m	1	11.80	1.20	0.15	2.12		
3rd main, LHS							
Ch: 0 to 30m	1	30.00	1.20	0.15	5.40		
Ch: 30 to 60m	1	30.00	1.20	0.15	5.40		
Ch: 60 to 73.4m	1	13.40	1.20	0.15	2.41		
2nd cross to 3rd cross							
4th main, RHS							
Ch: 0 to 27.4m	1	27.40	1.20	0.15	4.93		
Ch: 27.4 to 36.5m	1	9.10					
Ch: 36.5 to 54.9m	1	18.40	1.20	0.15	3.31		
4th main, LHS							
Ch: 0 to 30m	1	30.00	1.20	0.15	5.40		
Ch: 30 to 60m	1	30.00	1.20	0.15	5.40		
Ch: 60 to 74.7m	1	14.70	1.20	0.15	2.65		
2nd cross							
Ch: 0 to 25.6m	1	25.60	1.20	0.15	4.61		
Road Gap							
Ch: 0 to 25.5m	1	25.50	1.20	0.15	4.59		
Road Gap							
Ch: 0 to 25.2m	1	25.20	1.20	0.15	4.54		
Road Gap							
Ch: 0 to 25.8m	1	25.80	1.20	0.15	4.64		
Road Gap							
Ch: 0 to 25.5m	1	25.50	1.20	0.15	4.59		
Culvert							
1st cross 2nd Mn	1	4.90	1.60	0.15	1.18		
1st cross 3rd Mn	1	5.00	1.60	0.15	1.20		
1st cross 4th Mn	1	4.40	1.60	0.15	1.06		
Present Qty						198.85	Cum

Contractor



Assistant Engineer

ಸಹಾಯಕ ಕಾರ್ಯದರ್ಶಿ, ಅಭಿವೃದ್ಧಿ
ಯಂತ್ರೋಪಕರಣ ಇಲಾಖೆ,
ಬಿ.ಬಿ.ಎಂ.ಸಿ. ಬೆಂಗಳೂರು-106
12/11/2019

(4)

Name of Work: Improvements to roads and construction of RCC drains at Attur Village and surrounding areas in Ward No. 03

Date of Pre-Measurement : 25/11/2019

Detailed Measurements

Item No	Discription of Item	No	Length	Breadth	Depth	Qty	Unit
3	Providing and laying plain/reinforced cement concrete for side drains using M20 nominal mix concrete with OPC at 300 kgs. With 20mm and sown size granite metal course aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compacted for walls and bottom including centring shuttering cost of material HOM of						
	Raft						
	Attur layout						
	Sandeer Unni Krishna Road to 1st cross						
	2nd main, RHS						
	Ch: 0 to 30m	1	30.00	1.10	0.15	4.95	
	Ch: 30 to 33.80m	1	3.80	1.10	0.15	0.63	
	Ch: 33.80 to 42.50m	1	8.70				
	Ch: 42.5 to 70.00m	1	27.50	1.10	0.15	4.54	
	2nd main, LHS						
	Ch: 0 to 30m	1	30.00	1.10	0.15	4.95	
	Ch: 30 to 60m	1	30.00	1.10	0.15	4.95	
	Ch: 60 to 71m	1	11.00	1.10	0.15	1.82	
	3rd main, RHS						
	Ch: 0 to 30m	1	30.00	1.10	0.15	4.95	
	Ch: 30 to 60m	1	30.00	1.10	0.15	4.95	
	Ch: 60 to 69.5m	1	9.50	1.10	0.15	1.57	
	3rd main, LHS						
	Ch: 0 to 30m	1	30.00	1.10	0.15	4.95	
	Ch: 30 to 60m	1	30.00	1.10	0.15	4.95	
	Ch: 60 to 73m	1	13.00	1.10	0.15	2.15	
	1st cross to 2nd cross						
	2nd main, RHS						
	Ch: 0 to 27.30m	1	27.30	1.10	0.15	4.50	
	Ch: 27.30 to 36.90m	1	9.60				
	Ch: 36.90 to 54.30m	1	17.40	1.10	0.15	2.87	
	2nd main, LHS						
	Ch: 0 to 30m	1	30.00	1.10	0.15	4.95	
	Ch: 30 to 54.2m	1	24.20	1.10	0.15	3.99	
	1st cross to 2nd cross						
	3rd main, RHS						
	Ch: 0 to 26.90m	1	26.90	1.10	0.15	4.44	
	Ch: 26.90 to 36.30m	1	9.40				
	Ch: 36.30 to 45.45m	1	9.15	1.10	0.15	1.51	
	3rd main, LHS						
	Ch: 0 to 30m	1	30.00	1.10	0.15	4.95	
	Ch: 30 to 53.9m	1	23.90	1.10	0.15	3.94	
	1st cross to 2nd cross						
	4th main, RHS						
	Ch: 0 to 30m	1	30.00	1.10	0.15	4.95	
	Ch: 30 to 54.6m	1	24.60	1.10	0.15	4.06	

4th main, LHS						
Ch: 0 to 10.2m	1	10.20				
Ch: 10.2 to 40.2m	1	30.00	1.10	0.15	4.95	
Ch: 40.2 to 54.8m	1	14.60	1.10	0.15	2.41	
2nd cross to 3rd cross						
2nd main, RHS						
Ch: 0 to 30m	1	30.00	1.10	0.15	4.95	
Ch: 30 to 31.1m	1	1.10	1.10	0.15	0.18	
Ch: 31.1 to 36.6m	1	5.50				
Ch: 36.6 to 40.6m	1	4.00	1.10	0.15	0.66	
Ch: 40.6 to 43.8m	1	3.20				
Ch: 43.8 to 55.0m	1	11.20	1.10	0.15	1.85	
Ch: 55.0 to 64.2m	1	9.20				
Ch: 64.2 to 72.9m	1	8.70	1.10	0.15	1.44	
2nd main, LHS						
Ch: 0 to 30m	1	30.00	1.10	0.15	4.95	
Ch: 30 to 60m	1	30.00	1.10	0.15	4.95	
Ch: 60 to 74.5m	1	14.50	1.10	0.15	2.39	
2nd cross to 3rd cross						
3rd main, RHS						
Ch: 0 to 30m	1	30.00	1.10	0.15	4.95	
Ch: 30 to 60m	1	30.00	1.10	0.15	4.95	
Ch: 60 to 71.8m	1	11.80	1.10	0.15	1.95	
3rd main, LHS						
Ch: 0 to 30m	1	30.00	1.10	0.15	4.95	
Ch: 30 to 60m	1	30.00	1.10	0.15	4.95	
Ch: 60 to 73.4m	1	13.40	1.10	0.15	2.21	
2nd cross to 3rd cross						
4th main, RHS						
Ch: 0 to 27.4m	1	27.40	1.10	0.15	4.52	
Ch: 27.4 to 36.5m	1	9.10				
Ch: 36.5 to 54.9m	1	18.40	1.10	0.15	3.04	
4th main, LHS						
Ch: 0 to 30m	1	30.00	1.10	0.15	4.95	
Ch: 30 to 60m	1	30.00	1.10	0.15	4.95	
Ch: 60 to 74.7m	1	14.70	1.10	0.15	2.43	
2nd cross						
Ch: 0 to 25.6m	1	25.60	1.10	0.15	4.22	
Road Gap						
Ch: 0 to 25.5m	1	25.50	1.10	0.15	4.21	
Road Gap						
Ch: 0 to 25.2m	1	25.20	1.10	0.15	4.16	
Road Gap						
Ch: 0 to 25.8m	1	25.80	1.10	0.15	4.26	
Road Gap						
Ch: 0 to 25.5m	1	25.50	1.10	0.15	4.21	
Wall						
Attur layout						
Sandeer Unni Krishna Road to 1st cross						
2nd main, RHS						
Ch: 0 to 30m	2	30.00	0.15	0.55	4.95	

Ch: 30 to 33.80m	2	3.80	0.15	0.55	0.63
Ch: 33.80 to 42.50m	2	8.70			
Ch: 42.5 to 70.00m	2	27.50	0.15	0.55	4.54
2nd main, LHS					
Ch: 0 to 30m	2	30.00	0.15	0.60	5.40
Ch: 30 to 60m	2	30.00	0.15	0.55	4.95
Ch: 60 to 71m	2	11.00	0.15	0.60	1.98
3rd main, RHS					
Ch: 0 to 30m	2	30.00	0.15	0.60	5.40
Ch: 30 to 60m	2	30.00	0.15	0.60	5.40
Ch: 60 to 69.5m	2	9.50	0.15	0.60	1.71
3rd main, LHS					
Ch: 0 to 30m	2	30.00	0.15	0.60	5.40
Ch: 30 to 60m	2	30.00	0.15	0.60	5.40
Ch: 60 to 73m	2	13.00	0.15	0.60	2.34
1st cross to 2nd cross					
2nd main, RHS					
Ch: 0 to 27.30m	2	27.30	0.15	0.60	4.91
Ch: 27.30 to 36.90m	2	9.60			
Ch: 36.90 to 54.30m	2	17.40	0.15	0.60	3.13
2nd main, LHS					
Ch: 0 to 30m	2	30.00	0.15	0.60	5.40
Ch: 30 to 54.2m	2	24.20	0.15	0.60	4.36
1st cross to 2nd cross					
3rd main, RHS					
Ch: 0 to 26.90m	2	26.90	0.15	0.60	4.84
Ch: 26.90 to 36.30m	2	9.40			
Ch: 36.30 to 45.45m	2	9.15	0.15	0.60	1.65
3rd main, LHS					
Ch: 0 to 30m	2	30.00	0.15	0.60	5.40
Ch: 30 to 53.9m	2	23.90	0.15	0.60	4.30
1st cross to 2nd cross					
4th main, RHS					
Ch: 0 to 30m	2	30.00	0.15	0.60	5.40
Ch: 30 to 54.6m	2	24.60	0.15	0.60	4.43
4th main, LHS					
Ch: 0 to 10.2m	2	10.20			
Ch: 10.2 to 40.2m	2	30.00	0.15	0.60	5.40
Ch: 40.2 to 54.8m	2	14.60	0.15	0.60	2.63
2nd cross to 3rd cross					
2nd main, RHS					
Ch: 0 to 30m	2	30.00	0.15	0.60	5.40
Ch: 30 to 31.1m	2	1.10	0.15	0.60	0.20
Ch: 31.1 to 36.6m	2	5.50			
Ch: 36.6 to 40.6m	2	4.00	0.15	0.55	0.66
Ch: 40.6 to 43.8m	2	3.20			
Ch: 43.8 to 55.0m	2	11.20	0.15	0.60	2.02
Ch: 55.0 to 64.2m	2	9.20			
Ch: 64.2 to 72.9m	2	8.70	0.15	0.60	1.57
2nd main, LHS					
Ch: 0 to 30m	2	30.00	0.15	0.60	5.40
Ch: 30 to 60m	2	30.00	0.15	0.60	5.40

Ch: 60 to 74.5m	2	14.50	0.15	0.60	2.61
2nd cross to 3rd cross					
3rd main, RHS					
Ch: 0 to 30m	2	30.00	0.15	0.60	5.40
Ch: 30 to 60m	2	30.00	0.15	0.60	5.40
Ch: 60 to 71.8m	2	11.80	0.15	0.60	2.12
3rd main, LHS					
Ch: 0 to 30m	2	30.00	0.15	0.60	5.40
Ch: 30 to 60m	2	30.00	0.15	0.60	5.40
Ch: 60 to 73.4m	2	13.40	0.15	0.60	2.41
2nd cross to 3rd cross					
4th main, RHS					
Ch: 0 to 27.4m	2	27.40	0.15	0.60	4.93
Ch: 27.4 to 36.5m	2	9.10			
Ch: 36.5 to 54.9m	2	18.40	0.15	0.60	3.31
4th main, LHS					
Ch: 0 to 30m	2	30.00	0.15	0.60	5.40
Ch: 30 to 60m	2	30.00	0.15	0.60	5.40
Ch: 60 to 74.7m	2	14.70	0.15	0.60	2.65
2nd cross					
Ch: 0 to 25.6m	2	25.60	0.15	0.60	4.61
Road Gap					
Ch: 0 to 25.5m	2	25.50	0.15	0.60	4.59
Road Gap					
Ch: 0 to 25.2m	2	25.20	0.15	0.60	4.54
Road Gap					
Ch: 0 to 25.8m	2	25.80	0.15	0.60	4.64
Road Gap					
Ch: 0 to 25.5m	2	25.50	0.15	0.60	4.59
Culvert Raft					
1st cross 2nd Mn	1	4.90	1.50	0.23	1.69
1st cross 3rd Mn	1	5.00	1.50	0.23	1.73
1st cross 4th Mn	1	4.40	1.50	0.23	1.52
Culvert Ramp					
1st cross 2nd Mn	2	4.90	0.60	0.15	0.88
1st cross 3rd Mn	2	5.00	0.50	0.15	0.75
1st cross 4th Mn	2	4.40	0.45	0.15	0.59
Culvert Wall					
1st cross 2nd Mn	2	4.90	0.23	0.50	1.13
1st cross 3rd Mn	2	5.00	0.23	0.50	1.15
1st cross 4th Mn	2	4.40	0.23	0.50	1.01
Present Qty					383.57
					Cum

Contractor



Assistant Engineer

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ, ಅಭಿಯಂತರರು

ಯಲಹಂಕೆ ಬಸವನಗುಡಿ ಮುಖ್ಯಮಂತ್ರಿ

Asst. Executive Engineer,
ಬಿ.ಬಿ.ಎಂ.ಕೆ. ಬೆಂಗಳೂರು-106

25/11/2019

Name of Work: Improvements to roads and construction of RCC drains at Attur Village and surrounding areas in Ward No. 03

Date of Pre-Measurement : 25/11/2019

Detailed Measurements

Item No	Description of Item	No	Length	Breadth	Depth	Qty	Unit
4	KSRRB - M2300-14: Providing TMT steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, palcing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining memebres wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications.MORTH Specification No. 1600 & 2200 for TMT bars Fe 500. (P.No.239, I.No.29.29.2 of PW, P&IWTD S.R 2018-19)						
	Attur layout						
	2nd main, RHS						
	Total Drain length=61.30m						
	Main bar 10mm dia bar @ 100mm						
	0.61kg/mtr						
	No of U-bar=613.00Nos	613	2.10		0.61	785.25	
	Distribution bar						
	Distribution bar 10mm dia @ 110mm						
	0.61kg/mtr	19	61.30		0.61	710.47	
	2nd main, LHS						
	Total Drain length=71.0m						
	Main bar 10mm dia bar @ 100mm						
	0.61kg/mtr						
	No of U-bar=710.00Nos	710	2.10		0.61	909.51	
	Distribution bar						
	Distribution bar 10mm dia @ 110mm						
	0.61kg/mtr	19	71.00		0.61	822.89	
	3rd main, RHS						
	Total Drain length=69.5m						
	Main bar 10mm dia bar @ 100mm						
	0.61kg/mtr						
	No of U-bar=695.00Nos	695	2.10		0.61	890.30	
	Distribution bar						
	Distribution bar 10mm dia @ 110mm						
	0.61kg/mtr	19	69.50		0.61	805.51	
	3rd main, LHS						
	Total Drain length=73m						
	Main bar 10mm dia bar @ 100mm						
	0.61kg/mtr						
	No of U-bar=730.00Nos	730	2.10		0.61	935.13	
	Distribution bar						
	Distribution bar 10mm dia @ 110mm						
	0.61kg/mtr	19	73.00		0.61	846.07	
	2nd main, RHS						
	Total Drain length=44.70m						
	Main bar 10mm dia bar @ 100mm						
	0.61kg/mtr						

No of U-bar=447.00Nos	447	2.10	0.61	572.61
Distribution bar				
Distribution bar 10mm dia @ 110mm				
0.61kg/mtr	19	44.70	0.61	518.07
2nd main, LHS				
Total Drain length=54.20m				
Main bar 10mm dia bar @ 100mm				
0.61kg/mtr				
No of U-bar=542.00Nos	542	2.10	0.61	694.38
Distribution bar				
Distribution bar 10mm dia @ 110mm				
0.61kg/mtr	19	54.20	0.61	628.18
3rd main, RHS				
Total Drain length=36.05m				
Main bar 10mm dia bar @ 100mm				
0.61kg/mtr				
No of U-bar=360.00Nos	360	2.10	0.61	461.16
Distribution bar				
Distribution bar 10mm dia @ 110mm				
0.61kg/mtr	19	36.00	0.61	417.24
3rd main, LHS				
Total Drain length=53.9m				
Main bar 10mm dia bar @ 100mm				
0.61kg/mtr				
No of U-bar=539.00Nos	539	2.10	0.61	690.46
Distribution bar				
Distribution bar 10mm dia @ 110mm				
0.61kg/mtr	19	53.90	0.61	624.20
4th main, RHS				
Total Drain length=54.6m				
Main bar 10mm dia bar @ 100mm				
0.61kg/mtr				
No of U-bar=546.00Nos	546	2.10	0.61	699.43
Distribution bar				
Distribution bar 10mm dia @ 110mm				
0.61kg/mtr	19	54.60	0.61	632.81
4th main, LHS				
Total Drain length=44.6m				
Main bar 10mm dia bar @ 100mm				
0.61kg/mtr				
No of U-bar=446.00Nos	446	2.10	0.61	571.33
Distribution bar				
Distribution bar 10mm dia @ 110mm				
0.61kg/mtr	19	44.60	0.61	516.91
2nd main, RHS				
Total Drain length=55.0m				
Main bar 10mm dia bar @ 100mm				
0.61kg/mtr				
No of U-bar=550.00Nos	550	2.10	0.61	704.55
Distribution bar				
Distribution bar 10mm dia @ 110mm				

0.61kg/mtr		~~19~~	~~55.00~~		~~0.61~~	~~637.45~~	
2nd main, LHS							
Total Drain length=74.50m							
Main bar 10mm dia bar @ 100mm							
0.61kg/mtr							
No of U-bar=745.00Nos		~~745~~	~~2.10~~		~~0.61~~	~~954.35~~	
Distribution bar							
Distribution bar 10mm dia @ 110mm							
0.61kg/mtr		~~19~~	~~74.50~~		~~0.61~~	~~863.46~~	
3rd main, RHS							
Total Drain length=71.8m							
Main bar 10mm dia bar @ 100mm							
0.61kg/mtr							
No of U-bar=718.00Nos		~~718~~	~~2.10~~		~~0.61~~	~~919.76~~	
Distribution bar							
Distribution bar 10mm dia @ 110mm							
0.61kg/mtr		~~19~~	~~71.80~~		~~0.61~~	~~832.16~~	
3rd main, LHS							
Total Drain length=73.4m							
Main bar 10mm dia bar @ 100mm							
0.61kg/mtr							
No of U-bar=734.00Nos		~~734~~	~~2.10~~		~~0.61~~	~~940.25~~	
Distribution bar							
Distribution bar 10mm dia @ 110mm							
0.61kg/mtr		~~19~~	~~73.40~~		~~0.61~~	~~850.31~~	
4th main, RHS							
Total Drain length=45.8m							
Main bar 10mm dia bar @ 100mm							
0.61kg/mtr							
No of U-bar=458.00Nos		~~458~~	~~2.10~~		~~0.61~~	~~586.70~~	
Distribution bar							
Distribution bar 10mm dia @ 110mm							
0.61kg/mtr		~~19~~	~~45.80~~		~~0.61~~	~~530.82~~	
4th main, LHS							
Total Drain length=74.7m							
Main bar 10mm dia bar @ 100mm							
0.61kg/mtr							
No of U-bar=747.00Nos		~~747~~	~~2.10~~		~~0.61~~	~~956.91~~	
Distribution bar							
Distribution bar 10mm dia @ 110mm							
0.61kg/mtr		~~19~~	~~74.70~~		~~0.61~~	~~865.77~~	
2nd cross							
Total Drain length=127.6m							
Main bar 10mm dia bar @ 100mm							
0.61kg/mtr							
No of U-bar=1276.00Nos		~~1276~~	~~2.10~~		~~0.61~~	~~1634.56~~	
Distribution bar							
Distribution bar 10mm dia @ 110mm							
0.61kg/mtr		~~19~~	~~127.60~~		~~0.61~~	~~1478.88~~	
Culvert							
Total Drain length=14.30m							

Main bar 10mm dia bar @ 100mm						
0.61kg/mtr						
No of U-bar=286.00Nos	286	2.20		0.61	383.81	
Distribution bar						
Distribution bar 10mm dia @ 150mm						
0.61kg/mtr	28	14.30		0.61	244.24	
					27116.70	
Present Qty					27.12	Ton

Contractor



[Signature]
Assistant Engineer

[Signature]
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ಯಶೋಧರ ಕಾರ್ಪೊರೇಷನ್, ಬೆಂಗಳೂರು-106
25/11/2019

ame of Work: Improvements to roads and construction of RCC drains
at Attur Village and surrounding areas in Ward No. 03

MEASUREMENT SHEETS

"FIRST AND FINAL BILL"

Name of Work: Improvements to roads and construction of RCC drains at Attur Village and surrounding areas in Ward No. 03

Detailed Measurements

Discription of Item	No	Length	Breadth	Depth	Qty	Unit	Rate	Amount
KSRRB 300 - Excavation for road, drains and similar works KSRRB 300-1. Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications.								
Pre-measurement sheet no 1 to 2					1192.07			
Present Qty	1192.07	Cum	215.28	256629.00				
KSRRB M2100-10. Providing and laying Plain cement concrete of mix 1:3:6 with OPC @ 220kgs, with crushed 40mm and down size graded granite metal coarse aggregates @ 0.89cum and fine aggregates @ 0.46cum, in foundation mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days including cost of all materials, labour, HOM curing, form works, scaffolding and								
Pre-measurement sheet no 3 to 4					198.85			
Present Qty	198.85	Cum	5421.90	1078140.00				
Providing and laying plain/reinforced cement concrete for side drains using M20 nominal mix concrete with OPC at 300 kgs. With 20mm and sown size granite metal course aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compacted for walls and bottom including centring shuttering cost of material HOM of machinery curing etc., complete exeluding cost of steel as per MORTH specification								
Pre-measurement sheet no 5 to 8					383.57			
Present Qty	383.57	Cum	7070.20	2711905.00				
KSRRB - M2300-14: Providing TMT steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, palcing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining memebtrs wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per								
Pre-measurement sheet no 9 to 12					27.12			
Present Qty	27.12	Tn	73992.24	2006426.00				

Contractor



Assistant Engineer

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ಯು.ಪಂ.ಕ. ಬೆಂಗಳೂರು-108
25/11/2019

Work: Improvements to roads and construction of RCC drains at Attur Village and surrounding areas in Ward No. 03

of Measurement : 25/1/2020

Detailed Measurements

Discription of Item	No	Length	Breadth	Depth	Qty	Unit	Rate	Amount
Providing and fixing RCC precast cover slab of 100mm thick for drain in cement concrete 1:1.5:3 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of								
Attur layout								
Sandeer Unni Krishna Road to 1st cross								
2nd main, RHS								
Ch: 0 to 30m	✓	30.00	0.90		27.00			
Ch: 30 to 33.80m	✓	3.80	0.90		3.42			
Ch: 33.80 to 42.50m	✓	8.70						
Ch: 42.5 to 70.00m	✓	27.50	0.90		24.75			
2nd main, LHS								
Ch: 0 to 30m	✓	30.00	0.90		27.00			
Ch: 30 to 60m	✓	30.00	0.90		27.00			
Ch: 60 to 71m	✓	11.00	0.90		9.90			
3rd main, RHS								
Ch: 0 to 30m	✓	30.00	0.90		27.00			
Ch: 30 to 60m	✓	30.00	0.90		27.00			
Ch: 60 to 69.5m	✓	9.50	0.90		8.55			
3rd main, LHS								
Ch: 0 to 30m	✓	30.00	0.90		27.00			
Ch: 30 to 60m	✓	30.00	0.90		27.00			
Ch: 60 to 73m	✓	13.00	0.90		11.70			
1st cross to 2nd cross								
2nd main, RHS								
Ch: 0 to 27.30m	✓	27.30	0.90		24.57			
Ch: 27.30 to 36.90m	✓	9.60						
Ch: 36.90 to 54.30m	✓	17.40	0.90		15.66			
2nd main, LHS								
Ch: 0 to 30m	✓	30.00	0.90		27.00			
Ch: 30 to 54.2m	✓	24.20	0.90		21.78			
1st cross to 2nd cross								
3rd main, RHS								
Ch: 0 to 26.90m	✓	26.90	0.90		24.21			
Ch: 26.90 to 36.30m	✓	9.40						
Ch: 36.30 to 45.45m	✓	9.15	0.90		8.24			
3rd main, LHS								
Ch: 0 to 30m	✓	30.00	0.90		27.00			
Ch: 30 to 53.9m	✓	23.90	0.90		21.51			
1st cross to 2nd cross								
4th main, RHS								
Ch: 0 to 30m	✓	30.00	0.90		27.00			
Ch: 30 to 54.6m	✓	24.60	0.90		22.14			
4th main, LHS								
Ch: 0 to 10.2m	✓	10.20						
Ch: 10.2 to 40.2m	✓	30.00	0.90		27.00			

06/02/2020

Ch: 40.2 to 54.8m	✓	14.60	0.90	✓	13.14		
2nd cross to 3rd cross							
1st main, RHS							
Ch: 0 to 30m	✓	30.00	0.90	✓	27.00		
Ch: 30 to 31.1m	✓	1.10	0.90	✓	0.99		
Ch: 31.1 to 36.6m	✓	5.50					
Ch: 36.6 to 40.6m	✓	4.00	0.90	✓	3.60		
Ch: 40.6 to 43.8m	✓	3.20					
Ch: 43.8 to 55.0m	✓	11.20	0.90	✓	10.08		
Ch: 55.0 to 64.2m	✓	9.20					
Ch: 64.2 to 72.9m	✓	8.70	0.90	✓	7.83		
2nd main, LHS							
Ch: 0 to 30m	✓	30.00	0.90	✓	27.00		
Ch: 30 to 60m	✓	30.00	0.90	✓	27.00		
Ch: 60 to 74.5m	✓	14.50	0.90	✓	13.05		
2nd cross to 3rd cross							
3rd main, RHS							
Ch: 0 to 30m	✓	30.00	0.90	✓	27.00		
Ch: 30 to 60m	✓	30.00	0.90	✓	27.00		
Ch: 60 to 71.8m	✓	11.80	0.90	✓	10.62		
3rd main, LHS							
Ch: 0 to 30m	✓	30.00	0.90	✓	27.00		
Ch: 30 to 60m	✓	30.00	0.90	✓	27.00		
Ch: 60 to 73.4m	✓	13.40	0.90	✓	12.06		
2nd cross to 3rd cross							
4th main, RHS							
Ch: 0 to 27.4m	✓	27.40	0.90	✓	24.66		
Ch: 27.4 to 36.5m	✓	9.10					
Ch: 36.5 to 54.9m	✓	18.40	0.90	✓	16.56		
4th main, LHS							
Ch: 0 to 30m	✓	30.00	0.90	✓	27.00		
Ch: 30 to 60m	✓	30.00	0.90	✓	27.00		
Ch: 60 to 74.7m	✓	14.70	0.90	✓	13.23		
Deduct available slabs	-50	0.60	0.90	✓	-27.00		
2nd cross							
Ch: 0 to 25.6m	✓	25.60	0.90	✓	23.04		
Road Gap							
Ch: 0 to 25.5m	✓	25.50	0.90	✓	22.95		
Road Gap							
Ch: 0 to 25.2m	✓	25.20	0.90	✓	22.68		
Road Gap							
Ch: 0 to 25.8m	✓	25.80	0.90	✓	23.22		
Road Gap							
Ch: 0 to 25.5m	✓	25.50	0.90	✓	22.95		
Missing slabs							
Chithra layout	20	0.60	0.90	✓	10.80		
Santosh nagar	26	0.60	0.90	✓	14.04		
Present Qty				974.93	Sqm	2337.00	2278400.00

Contractor



Assistant Engineer

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ಯಂತ್ರೋಪಕರಣ ಸಂಸ್ಥೆ, ಬೆಂಗಳೂರು.
ಬಿ.ಜಿ.ಎಂ.ಕೆ. ಬೆಂಗಳೂರು-108

25/1/2020

Name of Work: Improvements to roads and construction of RCC drains at Attur Village and surrounding areas in Ward No. 03									
Date of Measurement: 25/11/2020									
Detailed Measurements									
Item, including form work, lift charges	No	Length	Breadth	Depth	Qty	Unit	Rate	Amount	
Providing and fixing RCC precast cover slab of 250mm thick made out of CC 1:2:4 and jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge.									
Culvert									
1st cross 2nd Mn	1	4.90	1.50		7.35				
1st cross 3rd Mn	1	5.00	1.50		7.50				
1st cross 4th Mn	1	4.40	1.50		6.60				
Present Qty					21.45	Sqm	5418.00	116217.00	
Total								8447717.00	
12% GST								1013727.00	
4% KRIDL								337909.00	
Grand Total								9799353.00	

Contractor




 Assistant Engineer

GdFc
 25/11/2020
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 ರಸ್ತೆ ಮತ್ತು ಸಾರಿಗೆ ಇಲಾಖೆ, ಬೆಂಗಳೂರು
 ಬಿ.ಬಿ.ಎಂ.ಕೆ. ಬೆಂಗಳೂರು-106

25/11/2020